AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) <u>A computer program product that includes a computer-readable medium, the medium having stored thereon a sequence of instructions which, when executed by a processor, causes the processor to execute a method, the computer program product comprising:</u>

[[An]] <u>an</u> inference engine <u>communicably coupled to a virtual fab, wherein the inference engine</u> <u>is</u> configured to rank a plurality of clients using at least one parameter associated with each of the plurality of clients, the <u>inference</u> engine comprising:

a user interface configured to enable a user to select the at least one parameter;

a knowledge collection module configured to collect client information based on the at least one parameter; and

a calculation module configured to receive the collected information and calculate a client listing using a parameter-based cost function.

2. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 1 wherein the at least one parameter includes one of manufacturing technology, product type, volume of purchase order, client physical region, design library, tapeout instance, technology file, and chip implementation.

3. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 2 wherein the manufacturing technology includes 0.13 m and below, 0.15 m to 0.25 m, and 0.25 m and above.

4. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 2 wherein the product type includes one of digital, analog, mixed signal, radio frequency (RF), memory, micro-electro-mechanical system (MEMS), and high power.

5. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 1 wherein the parameter-based cost function comprises the at least one parameter.

6. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 5 wherein the parameter-based cost function further comprises at least one weighting factor corresponding to the at least one parameter.

7. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 6 wherein the parameter-based cost function is a linear function including at least one term wherein each term is a product of one of the at least one parameter and one of the at least one weighting factor correspondingly.

8. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 6 wherein the parameter-based cost function is a non-linear function.

9. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 1 wherein the parameter-based cost function is built in the calculation module.

10. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 1 wherein the parameter-based cost function is set up by a user.

11. (Canceled)

12. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim [[11]] <u>1</u> wherein the knowledge collection module collects the client information from a plurality of client databases in the virtual fab.

13. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim [[11]] <u>1</u> wherein the virtual fab is an entity of <u>a communications</u> network.

14. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 13 wherein the virtual fab further includes:
   a plurality of nodes;
   a manufacturing entity;
   an engineer entity;
   a foundry entity;
   a design library entity; and
   a plurality of databases.

15. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 1 wherein the user interface provides an interface of communication between a user and the inference engine.

16. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 15 wherein the communication comprises:

    selecting parameters for the cost function;

    selecting the cost function;

    selecting a weighting factor for each of the parameters;

    choosing time scope and region scope; and

    displaying a result.

17. (Currently Amended) A <u>computer program product that includes a computer-readable medium, the medium having stored thereon a sequence of instructions which, when executed by a processor, causes the processor to execute a</u> method of calculating a client listing using an inference engine <u>communicably coupled to a virtual fab,</u> ~~having a parameter-based cost function,~~ <u>the method</u> comprising:

    selecting parameters related to clients;

    selecting weighting factors to be associated with respective parameters;

    collecting knowledge relating to the selected parameters;

    calculating a parameter-based cost function from the collected knowledge; and

    providing results, wherein clients are ranked according to values of [[the]] <u>a</u> parameter-based cost function.

18. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 17 including setting up a value table for each of the selected parameters.

19. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 17 wherein collecting knowledge includes tracking client data associated with relevant parameters.

20. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 17 further comprising setting up parameter-based cost functions.

21. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 20 wherein setting up parameter-based cost functions includes selecting function type.

22. (Currently Amended) The ~~inference engine~~ <u>computer program product</u> of claim 20 wherein setting up parameter-based cost functions includes defining a function by a user.

23. (New) A system, comprising:

a virtual fab that manufactures one or more products for a plurality of clients, wherein at least one parameter is associated with each of the plurality of clients;

an inference engine communicably coupled to the virtual fab, wherein the inference engine is configured to rank the plurality of clients using the at least one parameter, the inference engine comprising:

a user interface configured to enable a user to select the at least one parameter;

a knowledge collection module configured to collect client information based on the at least one parameter; and

a calculation module configured to receive the collected information and calculate a client listing using a parameter-based cost function.